Amendments to the Claims:

(This listing of claims will replace all prior versions, and listing, of claims in
the application. Although the previous form of the claims may have
changed, in light of the responses by the USPTO, in particular in the
introductory and explanatory text , the substance of the application
and of the claims remains the same:)

Listing of Claims:

**The previous claims 1-7, (which were submitted on January 2003) have
been cancelled and claims 8-17, (which were submitted on
November 17, 2004) have been substituted as follows; with
changes in wordings in the current (i.e. Nov 17, 2004) filing over
the earlier filing (January 2003) underlined**

8. (Currently amended) A system enabling autonomous transactions by

blocks of information known as data packets, for payments for the purchase

and sale of such information and for payment for services such as

transmission and storage provided for such blocks of information, and

furthermore enabling autonomous transactions of such data packets with

other parties so as to enable self-adjusting markets in said information,

transmission, storage, and other kinds of services, such system being based

on data packets which include, (in addition to the conventional structure of data packets that contains, in particular, an information content "payload" and an "overhead" containing recipient and sender information), also two additional elements: a control mechanism and a payment mechanism, all stored on a computer-readable storage medium and transmittable by a network, thus enabling dynamic and changing commercial transactions outside the direct control of senders and recipients, and comprising of:

    a. A string of digital signals known as a transactional data-packet, storable on a computer-readable medium, and transmittable through a network;

    b. a string of digital signals known as an access token, denominated at a certain value, and storable individually or together with other access tokens as part of said transactional data-packet (a) in a dedicated field known as a packet wallet field;

    c. a software control program known as a packet controller, capable of acceptance or rejection of prices offered by facility gateways (d), and of release or admittance of access tokens (b) to or from such gateways, with such packet controller programmable by the issuer of transactional data-packets (a) and storable on a computer-

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readable storage medium on a dedicated field in said transactional data-packet, in a field known as a packet controller field;

d. a software program—able to interact with said transactional data-packet denoted above as (a) through said packet's packet controller (c), with resultant transactions transferring to or receiving from the said transaction wallet denoted in (b) the access tokens which the said transactional data-packets (a) carry—located at the facilities and equipment of users as well as of providers of various services involving information, such program known as a facility access gateway, and storable on a computer-readable medium.

8. (Previously presented) A system of payment for transactions, including but not limited to those involving information, comprising:

a) an electronic bit-string known as an access token, denominated at a certain value, capable of containing the address of the issuer of said access token, and storable as part of a data packet on a computer readable medium;

b) a software control program known as a packet controller, similarly storable as part of said data packet;

c) dedicated fields in said data packet known as a transactional data packet, to store one or several said access tokens denoted in (a) above

in a field known as a packet wallet, and to store said packet controller denoted in (b) above;

d) Storage media for data packets at various nodes of a network, as common for Internet and other data transmission systems; and

e) a software program -- able to interact with said data packets denoted above as (c) through said packets' packet controller (b), with transactions transferring or receiving the said access tokens (a) which the said packets (c) carry-- located at the facilities and equipment of providers of various services involving information, data, and media content, and/or located at the facilities and equipment of the users of such information, and not limited to computer, data communication, or Internet equipment, known as a facility access gateway, and including a facility access controller and a facility wallet, all stored on a storage medium and computer readable.

9. (Currently amended) A method of using the system in claim 8 with access tokens, comprising:

a. a sender of a transactional data-packet placing the access tokens, after being acquired from an issuer of said tokens, in the packet wallet of said transactional data-packet, together with instructions for a specified task, and sending them to a recipient, or recipient class, or to roam networks with a specified task;

b. the transactional data-packets, controlled by the packet controller, engaging in a transaction with the facilities gateways of a service provider such as a transmission network or other party, transferring said access tokens in full or part at the facility access gate of a service provider in return for access to the facility and its services, such as storage or transmission, with the terms of such exchange transaction dependent on circumstances such as congestion and demand conditions;

c. transferring one or several access tokens from the facility wallet to the packet wallet in return for the service which the transactional data-packet provides to the facility, such as the

transfer of the content information –such as audio, video, or text types of content--from the transactional data-packet to the facility, or in return for other consideration;

d. returning of the transactional data-packet, with the access tokens in the packet wallet, to the sender or a designated third party;

e. ability to re-use the access tokens (b) by the sender, or by the owners of the facilities' wallets, in subsequent transactions.

9. (Previously presented) A method of using the system in claim 8 with access tokens, comprising:

a. placing access tokens after being acquired from an issuer, in a packet wallet by a source of said transactional data packets;

b. transferring said access tokens in full or part at the facility access gate into the facility wallet in return for access to the facility and its services, or in return for other consideration;

c. transferring one or several access tokens from the facility wallet to the packet wallet in return for the service which the packet provides to the facility, or in return for other consideration; and

d. controlling said transfers by an interaction of the packet, such as through its packet controller, and the facility access.

10. (Currently amended) <u>A system enabling autonomous transactions for</u> <u>payments of various kinds, not limited to those of information transfers, and</u> <u>including payments and purchases, and utilizing many types of electronic</u> <u>money, such system being based on a computer program known as an</u> <u>intelligent agent, which also contains a payment mechanism, all stored on a</u> <u>computer-readable storage medium and transmittable by a network, thus</u> <u>enabling commercial transactions outside the direct control of senders and</u> <u>recipients, and thus enabling the creation of markets by autonomous agents,</u> <u>and comprising of</u>:

- a) a string of electronic <u>or other signals</u> known as electronic money, storable on a computer- readable <u>medium, in a data field known as an</u> <u>electronic wallet, stored on the transactional data-packet</u>;

- b) an automated software program known as an intelligent agent, storable and computer-readable, and <u>programmed to</u> transact with various facilities and equipment of providers of various services involving information, data, and media content, by transferring or receiving the said <u>electronic money from or into the electronic wallet</u>; and

- c) Storage media for data at various nodes of a network, as common for Internet and other data transmission systems.

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10. (Previously presented) A system of transactions, comprising:

   d) an electronic bit string known as an access token or electronic money, storable and computer readable, and being part of a software control program;

   e) said software control program known as an intelligent agent, storable and computer readable, such that said intelligent agent can transact with various facilities and equipment of providers of various services involving information, data, and media content, by transferring or receiving the said access tokens (a); and

   f) Storage media for data at various nodes of a network, as common for Internet and other data transmission systems.

11. (Currently amended) A method of using the system in claim 10 with an intelligent agent <u>and all types of electronic money</u>, for the purpose of engaging in all types of transactions, and comprising:

a) <u>programming an intelligent agent by its sender to engage in a transaction with other facilities, or to roam the networks with a specified task, and loaded with electronic money and an electronic wallet, and to accomplish the transaction with other facilities by way of various transmission networks</u> ;

b<u>) the intelligent agent engaging in transactions with said facilities, including acceptance or rejection of prices, engaging in auctions, authorization of purchases, and of sales</u>;

c<u>)</u> the intelligent agent<u>, in accordance with the negotiation it conducted with the facilities,</u> releasing or receiving, electronic money from other entities;

b) <u>and returning such remaining electronic money, and any information acquired through the transaction, to the party</u> engaging in transactions with said entities by the intelligent agent<u>, or using said electronic money for subsequent transactions.</u>

11. (Previously presented) A method of using the system in claim 10 with an intelligent agent, comprising:

Releasing and receiving of electronic money from other entities by the intelligent agent; and

engaging in transactions with said entities by the intelligent agent.

12. (Presently amended) A <u>system enabling</u> transactions <u>with blocks of information known as data packets, for the repetitive payment for purchases and sales of such information, such system based on simplified transaction packets containing content information as well as means of electronic payments, and</u> comprising of:

> <u>a) the system as in Claim 8, but without a packet controller (c)</u>

12. (Previously presented) A system of transaction, comprising:
   a) an electronic bit-string known as an access token, denominated at a certain value, and storable and machine-readable;
   b) a dedicated field in a data packet known as a transactional data packet to store said access tokens (a), known as the packet wallet;
   c) a software program -- located at the facilities and equipment of providers of various services involving information, data and media content, as well as located at the facilities of the users of such information-- known as a facility access gateway, and including a facility access controller and a facility wallet (b), all storable and machine-readable, with said software program of the facility access gateway able to transact with the transactional data packet (b) in

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transactions requiring no packet controller of the type used in Claim 8 and including a storage media; and

d) said storage media for data packets at various nodes of a network, as common for Internet and other data transmission systems.

13. (Presently amended) A method of using the system in claim 12 <u>for</u> <u>repetitive payments</u> with access tokens, comprising:

<u>a) a sender sending simplified transactional data-packets to a</u> <u>recipient or recipient class,</u> placing access tokens in the packet wallet after <u>their</u> being acquired from an issuer

b) transferring access tokens in full or in part at the facility access gate into the facility wallet in return for the services, which the packet provides to the facility, or in return for other consideration, and / or receiving said tokens from the facility wallet in return for services provided by said <u>simplified</u> transaction data packet; and

c) <u>returning the simplified transaction packets to the sender,</u> and redeeming said access tokens by the owners of said wallets by the issuer of the tokens or by others, or re-using said tokens for subsequent transactions.

13. (Previously presented) A method of using the system in claim 12 with access tokens, comprising:

placing the access tokens in the packet wallet after being acquired from an issuer;

transferring access tokens in full or in part at the facility access gate into the facility wallet in return for access to the facility and

its services, or in return for other consideration, and/or receiving said tokens from the facility wallet in return for services provided by said transaction data packet; and

redeeming said access tokens by the owners of said wallets at the issuer of the tokens or by others.

14. (Presently amended) A system as in any one of Claims 8, 10, and 12, with additional and severable features, <u>with the purpose of conducting a single master transaction instead of repetitive identical transactions of purchase, acquisition, transmission, storage or other transactions, such as those involving a lengthy information flow consisting of numerous packets,</u> and comprising:

a) a field known as the convoy information field, on a transactional data- packet <u>known as the master packet,</u> (or, for purposes of Claim 10, <u>known</u> as the convoy intelligent agent,) identifying the convoy containing other packets known as its follower packets , in whose behalf it conducts transactions with facilities, said field to be storable and computer- readable; and

b) a stored software program as part of the facility access controller that reads the source and destination addresses and other fields of convoy and follower packets, and is able to establish access conditions for follower packets based on said information, with the aim of reducing repetitive transactions.

14. (Previously presented) A system as in any one of Claims 8, 10, and 12, with the additional and severable features to enable additional types of performances, comprising:

a) a field on a transactional data packet, said field known as the convoy information field, or, for Claim 10, known as the convoy intelligent agent, with said convoy information field identifying other packets as its follower packets, in whose behalf it conducts transactions with facilities, said field to be storable and machine readable; and

b) a stored software program as part of the facility access controller that reads the source and destination addresses and other fields of convoy and follower packets, and is able to establish access conditions for follower packets based on said information, with the aim of facilitating repetitive high speed transactions.

15. (Currently amended) A system as in any one of Claims 8, 10, 12, <u>and</u> <u>14, and the methods of claims 9,11, and 13,</u> for the purpose of enabling long software instructions to be broken up into several data packets, <u>and to</u> <u>engage in the purposes of claims 8,10, 12, and 14,</u> and comprising:

        <u>a) the transactional data-packet divided into</u> several <u>shorter</u> <u>transactional</u> data <u>sub-</u>packets, storable and machine-readable on storage media, <u>which together form a full transaction data packet,</u> and which are associated with each other through an identification in the convoy information fields <u>contained in each of the said transactional</u> <u>data sub-packets.</u>

        <u>b) a software program as part of the facilities controller which</u> <u>assembles the transaction data sub-packets identified as part of the same</u> <u>convoy, into a full transaction data packet, and by stripping it of repetitive</u> <u>packet overhead information, said assembly for the purpose of enabling a</u> <u>transaction between the transactional-data packet and the facility controller.</u>

15. (Previously presented) A system as in any one of Claims 8, 10, and 12, further comprising:

        a) the packet controller and/or the packet wallet including the access tokens consisting of several data packets, storable and machine

readable on the storage media of data networks, that are associated with each other through identification in the convoy information field, for the purpose of enabling long programs to be broken up into several data packets.

16. (New) A system as defined in Claims 8, 10, 12, 14, and 15, including further software programs beyond the packet controller and the access tokens, enabling the transactional data-packets to engage in additional types of performance and applications, and further comprising:

a) additional software stored on the transactional data-packet, storable on the machine-readable storage media, and capable of interaction with facility controllers.

17. (New) A system as defined in claims 8,10, 12, 14, 15, and 16, creating facility gateways remote from the actual facility, including on transaction data-packets, for the purpose of enabling transactions distant from both parties to the transactions, thus enabling the creation of markets serving multiple participants, and further comprising:

a) facility gateways that can be located at a distance from the actual facility, and stored on a computer-readable medium;

b) transactional data-packets whose packet controllers can interact with each other, thus enabling them to transact while remote from facilities.